Final
Site-Specific Safety and Health Plan Attachment
Site Investigation at the Buildings South of Reilly Air Field, Parcel 501(7)
Fort McClellan
Calhoun County, Alabama
EPA ID No. AL7 210 020 562

Prepared for:

U.S. Army Corps of Engineers, Mobile District
109 St. Joseph Street
Mobile, Alabama 36602

Prepared by:

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Delivery Order CK005
Contract No. DACA21-96-D-0018
IT Project No. 783149

October 1999

Revision 1

This Site-Specific Safety and Health Plan must be used in conjunction with the Installation-Wide Safety and Health Plan, Fort McClellan, Alabama.

The following Site-Specific Safety and Health Plan (SSHP) has been designed for the methods presently contemplated by IT Corporation (IT) for execution of the proposed work. Therefore, the SSHP may not be appropriate if the work is not performed by or using the methods presently contemplated by IT. In addition, as the work is performed, conditions different from those anticipated may be encountered and the SSHP may have to be modified. Therefore, IT only makes representations or warranties as to the adequacy of the SSHP for currently anticipated activities and condition.

Final
Site-Specific Safety and Health Plan Attachment Approval
Fort McClellan, Calhoun County, Alabama

I have read and approve this site-specific safety and health plan attachment for the Buildings south of Reilly Airfield, Parcel 501(7) at Fort McClellan, Alabama, with respect to project hazards, regulatory requirements, and IT Corporation procedures.

Jeanne Yacoub, PE
Project Manager

10/03/99
Date

Michael Henderson, CIH
Health & Safety Manager

9/15/99
Date

Jeff Tarr
Site Coordinator

10/03/99
Date

Acknowledgements

The final approved version of this site-specific safety and health plan (SSHP) attachment for the Site Investigations at the Buildings South of Reilly Air Field, Parcel 501(7) at Fort McClellan, Alabama, has been provided to the site coordinator. I acknowledge my responsibility to provide the site coordinator with the equipment, materials, and qualified personnel to implement fully all safety requirements in this SSHP attachment. I will formally review this plan with the health and safety staff every 6 months until project completion.

Project Manager — Date: 10/13/99

I acknowledge receipt of this SSHP attachment from the project manager, and that it is my responsibility to explain its contents to all site personnel and cause these requirements to be fully implemented. Any change in conditions, scope of work, or other change that might affect worker safety requires me to notify the project manager and/or the health and safety manager.

Site Coordinator — Date: 10/13/99

Site-Specific Safety and Health Plan
Acknowledgement Form

I have been informed of, and will abide by the procedures set forth in, this site-specific safety and health plan attachment for the activities at the Buildings South of Reilly Air Field, Parcel 501(7) at Fort McClellan, Calhoun County, Alabama.

Printed Name	***Signature***	***Representing***	***Date***

Fort McClellan Gate Hours

Baltzell Gate	Baltzell Road. Open 24 hours daily, 7 days a week.

Fort McClellan Project Emergency Contacts

Fire Department (on post)	Ext. 17
Fire Department (off post)	(256) 820-1117
Ambulance (on post)	Ext. 12
Ambulance (off post)	(256) 848-2315
Military Police (on post)	Ext. 5-3821
Military Police (off post)	(256) 848-5555
Regional Medical Center	(256) 235-5121
Chemical Agent Emergencies	Ext. 17
UXO Emergencies	Ext. 17
UXO Nonemergencies/Reporting Only (Ronald Levy)	(256) 848-3758
National Response Center	(800) 424-8802
Poison Control Center	(800) 462-0800
EPA Region IV	(404) 562-8725
Ronald Levy, Chief, FTMC Environmental Management	(256) 848-3758
Ellis Pope, U.S. Army Corps of Engineers	(334) 690-3077
Jeanne Yacoub, IT Project Manager	(770) 663-1429
Michael Henderson, IT H&S Manager	(423) 690-3211
Dr. Elaine Theriault, IT Occupational Physician	(800) 229-3674

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BZ	breathing zone
ESE	Environmental Science and Engineering, Inc.
FTMC	Fort McClellan
PID	photoionization detector
PPE	personal protective equipment
SHP	installation-wide safety and health plan
SSHO	site safety and health officer
SSHP	site-specific safety and health plan
VOH	volatile organic hydrocarbons

1.0 Site Work Plan Summary

Project Objective. The objective of this investigation at Fort McClellan (FTMC), Calhoun County, Alabama is to collect and analyze samples from the Buildings South of Reilly Air Field, Parcel 501(7).

Project Tasks

- Collect ten surface soil samples.
- Collect ten subsurface soil samples.
- Collect six groundwater samples.
- Collect two depositional samples.
- Collect one sediment sample.
- Collect one surface water sample.

Personnel Requirements. Up to ten employees.

Note: All personnel on this site shall have received training, informational programs, and medical surveillance as outlined in the installation-wide safety and health plan (SHP) for site investigations at FTMC, and be familiar with the requirements of this site-specific SHP (SSHP). This SSHP must be used in conjunction with the SHP for FTMC.

2.0 Site Characterization and Analysis

2.1 Anticipated Hazards

The activity hazard analysis in Chapter 5.0 contains project-specific practices utilized to reduce or eliminate anticipated site hazards. The activity hazard analysis indicates specific chemical and physical hazards that may be present and encountered during each task from on-site operations. Below each task is a list of hazards and specific actions that will be taken to control the respective hazards. These control measures may include work practice controls, engineering controls, and/or use of appropriate personal protective equipment (PPE).

Reilly Air Field is a small asphalt air strip with a paved parking area, four buildings, and does not have an air traffic control tower. A prefabricated hanger was once located on the east side of the parking area, but has been removed. There was not any record found as to when the hanger was removed or the location of the hanger. There are two fenced and gated areas with paved parking areas. Buildings South of Reilly Air Field comprise approximately 16 acres.

The first fenced area just south of the airstrip is controlled by the FTMC Directorate of Community Safety (DCS) and is used as an impoundment yard for abandoned vehicles (Smith, 1999). There is a storage shed east of the impoundment yard. This area has only been the impoundment yard for less than a year. Previously, this area was used (for about 8 to 9 years) to store vehicles, campers, etc. for FTMC dependent housing personnel stationed at FTMC (Smith, 1999). Before the area was used to store FTMC personnel vehicles, this area was used to refuel helicopters using Reilly Air Field. The impoundment yard is currently used to store abandoned vehicles collected on base. Also, some vehicles in the impoundment yard are left from earlier personnel storage, but are considered abandoned because they have remained unclaimed for three or more years. Some of these vehicles are considered "junkers" (Smith, 1999). The DCS is planning to eventually dispose of the vehicle stored in the impoundment yard.

The second fenced area that is adjacent to and south of the impoundment yard is controlled by the Special Operations, U.S. Army Military Police as part of the Protective Services Evasive Driving Course (Weems, 1999). This area contains buildings for administration and maintenance and areas for vehicle storage and maintenance. The Protective Services Evasive Driving Course uses the airstrip for driver training. The compound has been used as part of the Protective Service Evasive Driving Course for about 15 to 16 years (Weems, 1999). Previously, this compound was used by the FTMC Recreation Services to store and rent recreational equipment

such as boats, campers, and camping gear to FTMC personnel. This compound contains 3 buildings: Building 421; an office building for the evasive driving course; Building 425, a building used for light vehicle maintenance; and Building 416, a flammable storage shed used to store vehicle oils and fluids (Weems, 1999). Gasoline is not stored on site. Within the fenced parking area, the site currently contains approximately 80 vehicles. These vehicles are used in several aspects of driver training by the Protective Services Evasive Driving Course such as for driving, shooting with live ammunition and demolition (Weems, 1999). Before vehicles are demolished, they first are emptied of any fluids. After vehicles are demolished and no longer useful in the driving course, the vehicles are removed from the site for disposal. However, there are typical oil and fluid stains evident on the asphalt parking area from the vehicle storage (Weems, 1999). Some auto parts, batteries, and old tires are accumulated throughout the site. There are not any reports or evidence of any USTs at the site.

Potential contaminant sources at the site may include diesel, benzene, toluene, ethyl benzene, xylenes, lead, and sulfuric acid.

Table 2-1 contains the toxicological and physiological properties of chemicals anticipated or to be used at the Buildings South of Reilly Air Field, Parcel 501(7).

2.2 General Site Information

Location of Site. The Buildings South of Reilly Air Field, Parcel 501(7), are located in the northern area of the Main Post. Buildings South of Reilly Air Field, Parcel 501(7) are located at the north end of the 10th Street and south of the Reilly Air Field. Buildings South of Reilly Airfield 501 compromise approximately 16 acres.

Site Topography. The elevation of the site is approximately 740 feet. Surface water appears to drain to the southwest.

Duration of Planned Employee Activity. Employee activity duration is 3 months.

Pathways for Hazardous Substance Dispersion. Possible pathways for hazardous substances in the area are groundwater and soils.

Table 2-1

Toxicological and Physical Properties of Chemicals
Buildings South of Reilly Air Field, Parcel 501(7)
Fort McClellan, Calhoun County, Alabama

Substance [CAS]	IP[a] (eV)	Odor Threshold (ppm)	Route[b]	Symptoms of Exposure	Treatment	TWA[c]	STEL[d]	Source[e]	IDLH (NIOSH)[f]
Acetone [67-64-1]	9.7	13-100	Inh Ing Con	Irritated eyes, nose, and throat; headache, dizziness; dermatitis.	Eye: Irrigate immediately Skin: Soap wash immediately Breath: Respiratory support Swallow: Immediate medical attention	750 ppm 750 ppm 250 ppm	1,000 ppm 1,000 ppm	PEL TLV REL	20,000 ppm
Benzene [71-43-2]	9.24	34-119	Inh Abs Ing Con	Irritates eyes, nose, respiratory system; giddiness; headache, nausea, staggered gait; fatigue, anorexia, lassitude; dermatitis; bone-marrow depression. Carcinogenic.	Eye: Irrigate immediately Skin: Soap wash promptly Breath: Respiratory support Swallow: Immediate medical attention	1 ppm (10 ppm) NIC-0.1 skin 0.1 ppm	5 ppm C1 ppm (Ca)	PEL TLV REL	Ca [1,000 ppm]* *OSHA
Ethyl benzene [100-41-4]	8.76	0.09-0.6	Inh Ing Con	Irritates eyes, mucous membranes; headache; dermatitis; narcosis, coma.	Eye: Irrigate immediately Skin: Water flush promptly Breath: Respiratory support Swallow: Immediate medical attention	100 ppm 100 ppm 100 ppm	125 ppm 125 ppm 125 ppm	PEL TLV REL	2,000 ppm
Fuel oil (diesel oil, medium)	?	?	Ing Inh Con	Ingestion causes nausea, vomiting, and cramps; depressed central nervous system, headache, coma, death; pulmonary irritation; kidney and liver damage; aspiration causes severe lung irritation, coughing, gagging, dyspnea, substernal stress, pulmonary edema; bronchopneumonia; excited, then depressed, central nervous system.	Eye: Irrigate promptly Skin: Soap wash Breath: Respiratory support Swallow: Immediate medical attention Aspiration: Immediate medical attention			PEL TLV REL	

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Fort McClellan, Calhoun County, Alabama

Substance [CAS]	IP[a] (eV)	Odor Threshold (ppm)	Route[b]	Symptoms of Exposure	Treatment	TWA[c]	STEL[d]	Source[e]	IDLH (NIOSH)[f]
Fuel Oil No. 1, see kerosene. [NA]								PEL TLV REL	
Fuel Oil No. 2, see fuel oil. [NA]								PEL TLV REL	
Fuel Oils No. 4, 5, and 6 [NA]	?	?	Abs Con	Low toxicity; prolonged contact may produce systemic effects.	Eye: Irrigate immediately (15 min) Skin: Soap wash immediately Swallow: Immediate medical attention			PEL TLV REL	
Kerosene	?	?	Inh Ing Con	Irritation to eyes, skin, nose, throat; burning sensation in chest; nausea; weakess; headache; confusion; drowsiness; vomiting; dermatitis; chemical pneumonia.	Eye: Irrigate immediately Skin: Soap wash promptly Breath: Respiratory support Swallow: Immediate medical attention	100 mg/m^3		PEL TLV REL	

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Fort McClellan, Calhoun County, Alabama

Substance [CAS]	IP[a] (eV)	Odor Threshold (ppm)	Route[b]	Symptoms of Exposure	Treatment	TWA[c]	STEL[d]	Source[e]	IDLH (NIOSH)[f]
n-Hexane [110-54-3]	10.18	65-248	Inh Ing Con	Lightheadedness; nausea, headache; numbness of the extremities, muscular weakness; irritation of the eyes and nose; dermatitis; chemical pneumonia; giddiness.	Eye: Irrigate immediately Skin: Soap wash immediately Breath: Respiratory support Swallow: Immediate medical attention	50 ppm 50 ppm 50 ppm		PEL TLV REL	5,000 ppm
Hydrogen chloride (hydrochloric acid) [74-90-8]	12.74	0.255-10.6	Inh Ing Con	Inflamed nose, throat, larynx; cough, burns throat, choking; burns eyes, skin; dermatitis; in animals; laryngeal spasm; pulmonary edema.	Eye: Irrigate immediately Skin: Water flush immediately Breath: Respiratory support Swallow: Immediate medical attention		C5 ppm C5 ppm C5 ppm	PEL TLV REL	100 ppm
Isopropyl alcohol (isopropanol) [67-63-0]	10.16	43-200	Inh Ing Con	Mild irritation of the eyes, nose, and throat; drowsiness, dizziness, headache; dry, cracked skin.	Eye: Irrigate immediately Skin: Water flush Breath: Respiratory support Swallow: Immediate medical attention	400 ppm 400 ppm 400 ppm	500 ppm 500 ppm 500 ppm	PEL TLV REL	12,000 ppm
Lead [7439-92-1]	NA	NA	Inh Ing Con	Weak, insomnia, facial pallor, constipated, abdominal pain, colic, anemia, irritated eyes, paralysis of wrists and ankles, encephalopathy.	Eye: Irrigate immediately Skin: Soap wash promptly Breath: Respiratory support Swallow: Immediate medical attention	0.05 mg/m 0.05 mg/m 0.1 mg/m		PEL TLV REL	100 mg/m
Methanol	10.85	4.2-5960	Inh Abs Ing Con	Irritated eyes, headache, drowsiness, lightheadedness, nausea, vomiting, disturbance in vision, blindness.	Eye: Irrigate immediately Skin: Water flush promptly Breath: Fresh air Swallow: Immediate medical attention		200 ppm (skin) 200 ppm (skin) 200 ppm	PEL TLV REL	25,000 ppm

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Fort McClellan, Calhoun County, Alabama

Substance [CAS]	IP[a] (eV)	Odor Threshold (ppm)	Route[b]	Symptoms of Exposure	Treatment	TWA[c]	STEL[d]	Source[e]	IDLH (NIOSH)[f]
Motor oil [NA]	?	?	Inh Ing	Irritated eyes, skin, respiratory system; usually only a problem if misted or ingested.	Eye: Irrigate immediately (15 min) Skin: Soap wash immediately Swallow: Immediate medical attention			PEL TLV REL	
Naphtha, see petroleum distillate									
Nitric acid [7697-37-2]	11.95	0.3-1	Inh Ing Con	Irritated eyes, mucous membranes, and skin; delayed pulmonary edema, pneumonitis, bronchitis; dental erosion.	Eye: Irrigate immediately Skin: Water flush promptly Breath: Respiratory support Swallow: Immediate medical attention	2 ppm 2 ppm 2 ppm	4 ppm 4 ppm 4 ppm	PEL TLV REL	100 ppm
Petroleum distillate (Naphtha) [8002-05-9]	?	?	Con Ing	Coughing, dyspnea, nausea, or vomiting.	Eye: Irrigate immediately Skin: Soap wash immediately Breath: Respiratory support Swallow: Immediate medical attention	400 ppm		PEL TLV REL	
Petroleum hydrocarbons, see Stoddard solvent									
Portland cement			Inh	Fine gray powder that can be irritating if inhaled or in eyes.	Eye: Irrigate immediately Skin: Soap wash immediately Breath: Respiratory support Swallow: Immediate medical attention		10 mg/m^3 10 mg/m^3/ total dust 5 mg/m^3 respirable fraction	TLV PEL/REL	

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Substance [CAS]	IP[a] (eV)	Odor Threshold (ppm)	Route[b]	Symptoms of Exposure	Treatment	TWA[c]	STEL[d]	Source[e]	IDLH (NIOSH)[f]
Sodium hydroxide [1310-73-2]	NA	NA	Inh Ing Con	Irritated nose; pneumonitis; burns eyes, and skin; temporary loss of hair.	Eye: Irrigate immediately Skin: Water flush immediately Breath: Respiratory support Swallow: Immediate medical Attention		C2 mg/m^3 C2 mg/m^3 C2 mg/m^3	PEL TLV REL	250 mg/m^3
Stoddard Solvent	?	?	Inh Ing Con	Irritated eyes, nose, and throat; dizziness; dermatitis; chemical pneumonia.	Eye: Irrigate immediately Skin: Soap wash immediately Breath: Respiratory support Swallow: Immediate medical attention	500 ppm 350 mg/m^3		PEL TVL REL	20,000 mg/m^3
Sulfuric Acid [7664-93-9]	?	?	Inh Ing Con	Irritated eyes, skin, nose, and throat; pulmonary edema, bronchitis, conjunctivitis, stomatis, dental erosion, eye and skin burns; dermatitis.	Eye: Irrigate Immediately Skin: Water flush immediately Breath: Respiratory Support Swallow: Immediate medical attention	1 mgl/m^3 1 mgl/m^3 1 mgl/m^3	- 3mg/m^3 -	PEL TVL REL	15 mg/m^3
Toluene [108-88-3]	8.82	0.16-37	Inh Abs Ing Con	Fatigue, weakness; confusion, euphoria, dizziness, headache; dilated pupils, lacrimation; nervousness, muscular fatigue, insomnia; paralysis; dermatitis.	Eye: Irrigate immediately Skin: Soap wash promptly Breath: Respiratory support Swallow: Immediate medical attention	100 ppm 50 ppm (skin) 100 ppm	150 ppm 150 ppm	PEL TLV REL	2,000 ppm

Table 2-1

Toxicological and Physical Properties of Chemicals
Buildings South of Reilly Air Field, Parcel 501(7)
Fort McClellan, Calhoun County, Alabama

Substance [CAS]	IP[a] (eV)	Odor Threshold (ppm)	Route[b]	Symptoms of Exposure	Treatment	TWA[c]	STEL[d]	Source[e]	IDLH (NIOSH)[f]
Xylene (o-, m-, and p-isomers) [1330-20-7;95-47-6; 108-38-3;106-42-3]	8.56/ 8.56/ 8.44	1.1-20	Inh Abs Ing Con	Dizziness, excitement, drowsiness, incoordination, staggering gait; irritated eyes, nose, throat; corneal vacuolization; anorexia, nausea, vomiting, abdominal pain; dermatitis.	Eye: Irrigate immediately Skin: Soap wash promptly Breath: Respiratory support Swallow: Immediate medical attention	100 ppm 100 ppm 100 ppm	150 ppm 150 ppm 150 ppm	PEL TLV REL	1,000 ppm

[a]IP = Ionization potential (electron volts).
[b]Route = Inh, Inhalation; Abs, Skin absorption; Ing, Ingestion; Con, Skin and/or eye contact.
[c]TWA = Time-weighted average. The TWA concentration for a normal work day (usually 8 or 10 hours) and a 40-hour work week, to which nearly all workers may be repeatedly exposed, day after day without adverse effect.
[d]STEL = Short-term exposure limit. A 15-minute TWA exposure that should not be exceeded at any time during a workday, even if the TWA is not exceeded.
[e]PEL = Occupational Safety and Health Administration (OSHA) permissible exposure limit (29 CFR 1910.1000, Table Z).
AEL = Airborne Exposure Limit.
TLV = American Conference of Governmental Industrial Hygiene (ACGIH) threshold limit value—TWA.
REL = National Institute for Occupational Safety and Health (NIOSH) recommended exposure limit.
[f]IDLH (NIOSH)—Immediately dangerous to life or health (NIOSH). Represents the maximum concentration from which, in the event of respirator failure, one could escape within 30 minutes without a respirator and without experiencing any escape-impairing or irreversible health effects.
NE = No evidence could be found for the existence of an IDLH (NIOSH Pocket Guide to Chemical Hazards, Pub. 1998).
C = Ceiling limit value which should not be exceeded at any time.
Ca = Carcinogen.
NA = Not applicable.
? = Unknown.
LEL = Lower explosive limits.
LC_{50} = Lethal concentration for 50 percent of population tested.
LD_{50} = Lethal dose for 50 percent of population tested.
NIC = Notice of intended change (ACGIH).

References:

American Conference of Governmental Industrial Hygienists Guide to Occupational Exposure Values, 1998, compiled by the American Conference of Governmental Industrial Hygienists.
Amoore, J. E. Hautula, "Odor as an Aid to Chemical Safety," Journal of Applied Toxicology, 1983.
Clayton, George D., Clayton, F. E., Patty's Industrial Hygiene and Toxicology, 3rd ed., John Wiley & Sons, New York.

Table 2-1

Toxicological and Physical Properties of Chemicals
Buildings South of Reilly Air Field, Parcel 501(7)
Fort McClellan, Calhoun County, Alabama

Documentation of TLVs and BEIs, American Conference of Governmental Industrial Hygienists, 6th ed., 1998.
Fazzuluri, F. A., Compilation of Odor and Taste Threshold Values Data, American Society for Testing and Materials, 1978.
Gemet, L. J. Van, Compilation of Odor Threshold Values in Air and Water, CIVO, Netherlands, 1977.
Gemet, L. J. Van, Compilation of Odor Threshold Values in Air and Water, Supplement IV, CIVO, Netherlands, 1977.
Lewis, Richard J., Sr., 1992, Sax's Dangerous Properties of Industrial Materials, 8th ed., Van Nostrand Reinhold, New York.
Micromedex Tomes Plus (R) System, 1992, Micromedex, Inc.
National Institute for Occupational Safety and Health Pocket Guide to Chemicals, Pub., 1998, National Institute for Occupational Safety and Health.
Odor Threshold for Chemicals with Established Occupational Health Standards, American Industrial Hygiene Association, 1989.
Respirator Selection Guide, 3M Occupational Health and Safety Division, 1993.
Verschuseren, K., Handbook of Environmental Data on Organic Chemicals, Van Nostrand and Reinhold, 1977.
Warning Properties of Industrial Chemicals-Occupational Health Resource Center, Oregon Lung Association.
Workplace Environmental Exposure Levels, American Industrial Hygiene Association, 1992.

3.0 Personal Protective Equipment

The work activities will begin in the following levels of protection. Also, a completed description of Level D, Modified Level D, and Level C PPE is provided.

Task	Initial Level of PPE
Staging equipment	Level D
Collecting samples	Modified Level D*

*Initial level will be raised to Level C or higher if air monitoring results in the worker's breathing zone (BZ) are greater than action levels.

Level D. The minimal level of protection that will be required of IT Corporation personnel at the site will be Level D. The following equipment will be used for Level D protection:

- Coveralls or work clothing
- Leather work gloves (when necessary)
- Steel-toed safety boots
- Safety glasses
- Hard hat
- Hearing protection (when working near/adjacent to operating equipment).

Modified Level D. The following equipment will be used for Level D-Modified protection:

- Tyvek coveralls
- Latex boot covers
- Nitrile, heavy work, or latex gloves
- Steel-toed safety boots
- Safety glasses
- Hard hat
- Hearing protection (when working near/adjacent to operating equipment).

Note: In addition to modifying Level D PPE, the operator of high-pressure water jetting equipment shall wear metatarsal guards for the legs and feet.

Level C. Level C protection will not be used unless air-monitoring data indicate the need for upgrade; however, the equipment shall be readily available on site. The following equipment will be used for Level C protection:

- National Institute of Occupational Safety and Health-approved full-face, air-purifying respirators equipped with organic vapor/acid gas/P100 cartridge
- Hooded, Saran-coated Tyvek, taped at gloves, boots, and respirator
- Nitrile gloves (outer)
- Latex or lightweight nitrile gloves (inner)
- Neoprene steel-toed boots or polyvinyl chloride overbooties/steel-toed safety boots
- Hard hat
- Hearing protection (when working near/adjacent to operating equipment).

Note: In addition to Level C PPE, the operator of high-pressure water jetting equipment shall wear metatarsal guards for the legs and feet.

4.0 Site Monitoring

The potential environmental contaminants of concern resulting from the Buildings South of Reilly Airfield, Parcel 501(7) activities are diesel, benzene, toluene, ethyl benzene, xylenes, lead, and sulfuric acid. Table 4-1 contains action levels for site monitoring at the Buildings South of Reilly Airfield, Parcel 501(7).

Monitoring will be performed by the site safety and health officer (SSHO) during the performance of ground-intrusive operations. A calibrated photoionization detector (PID) (i.e., photovac 2020 PID or equivalent) organic vapor analyzer will be utilized to monitor the sampling locations and BZs to determine if any organic material may be present that would necessitate upgrading of protection level. A calibrated combustible gas/oxygen monitor will be utilized to monitor the sampling locations and BZs to determine if any combustible/flammable gases or oxygen levels may be present that would necessitate evacuating the site. Benzene detector tubes will be utilized to monitor the sampling locations and BZs for benzene when real time air monitoring action levels are met or exceeded. Benzene detector tubes will be utilized to monitor the sampling locations and BZs for benzene when action real time air monitoring action levels are met or exceeded. Table 4-2 contains the air monitoring frequency and location for site monitoring at the Buildings South of Reilly Airfield, Parcel 501(7).

Table 4-1

Action Levels
Buildings South of Reilly Air Field, Parcel 501(7)
Fort McClellan, Calhoun County, Alabama

When in Level C Personal Protective Equipment (PPE)

Analyte	Action Level	Required Action[a]
Volatile organic hydrocarbons (VOH)	≥ 10 ppm above background in breathing zone (BZ)	Stop work, evacuate work area, upgrade to Level B.
Benzene	≥ 5 ppm in BZ	Stop work, evacuate work area, upgrade to Level B.
Oxygen	≥ 20%, <23% < 20%, >23%	Normal operations. Stop work, evacuate work area.
Flammable vapors	≥ 10% lower explosive limit (LEL) < 10% LEL	Stop work, evacuate work area. Continue operations, monitor for volatile organic compounds (VOC).

When in Level D Modified/D PPE

Analyte	Action Level	Required Action[b]
VOHs	≥ 5 ppm above background in BZ	Stop activities, suspend work activities for 15 to 30 minutes, if readings are sustained then upgrade to Level C PPE.
Benzene	1 ppm in BZ	Upgrade to Level C PPE.
Oxygen	≥ 20%, <23% < 20%, >23%	Normal operations. Stop work, evacuate work area.
Flammable vapors	≥ 10% LEL < 10% LEL	Stop work, evacuate work area. Continue operations, monitor for VOCs.

Table 4-1

Action Levels
Buildings South of Reilly Air Field, Parcel 501(7)
Fort McClellan, Calhoun County, Alabama

When in Support Zone

Analyte	Action Level	Required Action
VOHs	≥ 1 ppm above background in BZ	Evacuate support zone and re-establish perimeter of exclusion zone.

[a] Four instantaneous peaks in any 15-minute period or a sustained reading for 5 minutes in excess of the action level will trigger a response.

[b] Contact with the H&S manager must be made prior to continuance of work. The H&S manager may then initiate perimeter/integrated air sampling along with additional engineering controls.

No one is permitted to downgrade levels of PPE without authorization from the H&S manager.

Table 4-2

Air Monitoring Frequency and Location
Buildings South of Reilly Air Field, Parcel 501(7)
Fort McClellan, Calhoun County, Alabama

Work Activity	Instrument	Frequency	Location
Staging equipment	OV Monitor	Initially for area	Breathing zone of employees
Sampling (groundwater and soil)	OV Monitor LEL/O_2 Monitor BDT	Continuously Continuously As needed	Breathing zone of employees Support zone

OV = Organic vapor.
LEL/O_2 = Lower explosive level/oxygen.
BDT = Benzene detector tube.

5.0 Activity Hazard Analysis

The attached activity hazard analysis (Table 5-1) is provided for the following activities:

- Setup of equipment and general field activities
- Soil and groundwater sampling.

All injuries and illnesses must be immediately reported to the site manager or the SSHO, who will then notify off-site personnel and organizations as necessary.

If hospital care must be provided, the victim shall be treated at Northeast Regional Medical Center. Directions to the hospital are provided in Figure 1-1.

Table 5-1

Activity Hazard Analysis
Buildings South of Reilly Air Field, Parcel 501(7)
Fort McClellan, Calhoun County, Alabama

Activity	Potential Hazards	Recommended Controls
Staging Equipment	Slip, trip, and fall hazards	• Determine best access route before transporting equipment. • Practice good housekeeping; keep work area picked up and clean as feasible. • Continually inspect the work area for slip, trip, and fall hazards. • Look before you step; ensure safe and secure footing.
	Heavy lifting	• Use proper lifting techniques. Lifts greater than 60 pounds require assistance or mechanical equipment.
	Falling objects	• Stay alert and clear of materials suspended overhead; wear hard hat and steel-toed boots.
	Flying debris, dirt, dust, etc.	• Wear safety glasses/goggles; ensure that eye wash is in proper working condition.
	Pinch points	• Keep hands, fingers, and feet clear of moving/suspended materials and equipment. • Beware of contact points. • Stay alert at all times!
	Cuts/bruises	• Use cotton or leather work gloves for material handling.
	Bees, spiders, and snakes	• Inspect work area carefully and avoid placing hands and feet into concealed areas.
	Ticks	• Wear light colored clothing (can see ticks better). • Mow vegetated and small brush areas. • Wear insect repellant. • Wear long sleeves and long pants. • Visually check oneself promptly and frequently after exiting the work area.
	Fire	• Fire extinguishers shall be suitably placed, distinctly marked, readily accessible, and maintained in a fully charged and operable condition.
	Hazard communication	• Label all containers as to contents and dispose of properly. • Ensure Material Safety Data Sheets (MSDS) are available for hazardous chemicals used on site.

Table 5-1

Activity Hazard Analysis
Buildings South of Reilly Air Field, Parcel 501(7)
Fort McClellan, Calhoun County, Alabama

Activity	Potential Hazards	Recommended Controls
Staging Equipment (continued)	Noise	• Sound levels above 85 decibels (dBA) mandates hearing protection.
	Lighting	• Adequate lighting will be provided to ensure a safe working environment.
	Cold stress	• Workers should wear insulated clothing when temperatures drop below 40 degrees Fahrenheit (°F). • Drink warm beverages on breaks. Refrain from drinking caffeinated beverages. • Remove wet clothing promptly. • Take breaks in warm areas. • Reduce work periods as necessary. • Layer work clothing.
	Poison ivy/oak/sumac	• Avoid plant areas if possible. • Wear long sleeves and long pants. • Promptly wash clothing that has contacted poisonous plants. • Wash affected areas immediately with soap and water.
	Heat rash	• Keep the skin clean and dry. • Change perspiration-soaked clothing, as necessary. • Bathe at end of work shift or day. • Apply powder to affected area.
	Heat cramps	• Drink plenty of cool fluids even when not thirsty. • Provide cool fluid for work crews. • Move victim to shaded, cool area.
	Heat exhaustion	• Conduct physiological worker monitoring as needed (i.e., heart rate, oral temperature). • Set up work/rest periods. • Use the "buddy system." • Allow workers time to acclimate. • Have ice packs available for use. • Take frequent breaks.

Table 5-1

Activity Hazard Analysis
Buildings South of Reilly Air Field, Parcel 501(7)
Fort McClellan, Calhoun County, Alabama

Activity	Potential Hazards	Recommended Controls
Staging Equipment (continued)	Heat stroke	• Evaluate possibility of night work. • Perform physiological monitoring on workers during breaks. • Wear body cooling devices.
	Contact with moving equipment/vehicles	• Work area will be barricaded/demarcated. • Equipment will be laid out in an area free of traffic flow. • Barricades shall be used on or around work areas when it is necessary to prevent the inadvertent intrusion of pedestrian traffic. • Barriers shall be used to protect workers from vehicular traffic. • Barriers shall be used to guard excavations adjacent to streets or roadways. • Flagging shall be used for the short term (less than 24 hours) to identify hazards until proper barricades or barriers are provided. • Heavy equipment shall have backup alarms.
	Forklift operations	• Use qualified and trained forklift operators. • The operator shall not exceed the load capacity rating for the forklift. • The load capacity shall be clearly visible on the forklift. • Forklift operators shall inform their supervisor of any prescribed medication that they are taking that would impair their judgement.
	Portable electric tools	• Portable electric tools that are unsafe due to faulty plugs, damaged cords, or other reasons, shall be tagged (do not use) and removed from service. • Portable electric tools and all cord and plug connected equipment shall be protected by a ground-fault circuit interrupter (GFCI) device. • Electrical tools shall be inspected daily prior to use.

Table 5-1

Activity Hazard Analysis
Buildings South of Reilly Air Field, Parcel 501(7)
Fort McClellan, Calhoun County, Alabama

Activity	Potential Hazards	Recommended Controls
Staging Equipment (continued)	Extension cords	• Extension cords that have faulty plugs, damaged insulation, or are unsafe in any way shall be removed from service. • Cords shall be protected from damage from sharp edges, projections, pinch points (doorways), and vehicular traffic. • Cords shall be suspended with a nonconductive support (rope, plastic ties, etc,). • Cords shall be designed for hard duty. • Cords shall be inspected daily.
	Lightning strikes	• Whenever possible, halt activities and take cover. • If outdoors, stay low to the ground. • Limit the body surface area that is in contact with the ground (i.e., kneeling on one knee is better than laying on the ground). • Seek shelter in a building if possible. • Stay away from windows. • If available, crouch under a group of trees instead of one. • Keep all body parts in contact with the ground as close as possible. • Remain 6 feet away from tree trunk if seeking shelter beneath tree(s). • If in a group, keep 6 feet of distance between people.
	Thunderstorms, tornadoes	• Listen to radio or TV announcements for pending weather information. • Cease field activities during thunderstorm or tornado warnings. • Seek shelter. Do not try to outrun a tornado.
Surveying	Slip, trip, and fall hazards	• Site workers will be required to wear hard hat, safety glasses with side shields, work gloves, and steel-toe boots when working in the field. • Provide adequate lighting in all work areas. • Whenever possible, avoid routing cords and hoses across walking pathways. • Flag or cover inconspicuous holes to protect against falls. • Work areas will be kept clean and orderly. • Garbage and trash will be disposed of daily in approved refuse containers. • Tools and accessories will be properly maintained and stored. • Work areas and floors will be kept free of dirt, grease, and slippery materials.

Table 5-1

Activity Hazard Analysis
Buildings South of Reilly Air Field, Parcel 501(7)
Fort McClellan, Calhoun County, Alabama

Activity	Potential Hazards	Recommended Controls
Surveying (continued)	Traffic accidents	• Place physical barrier (i.e., barricades, fencing) around work areas regularly occupied by pedestrians. • If working adjacent to roadways, have workers wear fluorescent orange vests. • Use warning signs or lights to alert oncoming traffic. • Assign flag person(s) if necessary to direct local traffic. • Set up temporary parking locations outside the immediate work area. • Motor vehicle operators shall obey all posted traffic signs, signals, and speed limits. • Pedestrians have the right-of-way. • Wear seat belts when vehicles are in motion.
	Wildlife hazards	• Workers should be cautious when driving through the site in order to avoid encounters with passing animals.
	Biological hazards	• Walking through overgrown grass areas, watch for snakes (rattlesnakes, moccasins, copperheads).
	Ticks	• Wear light colored clothing (can see ticks better). • Mow vegetated and small brush areas. • Wear insect repellant. • Wear long sleeves and long pants. • Visually check oneself promptly and frequently after exiting the work area.
	Poison ivy/oak/sumac	• Avoid plant areas if possible. • Wear long sleeves and long pants. • Promptly wash clothing that has contacted poisonous plants. • Wash affected areas immediately with soap and water.

Table 5-1

Activity Hazard Analysis
Buildings South of Reilly Air Field, Parcel 501(7)
Fort McClellan, Calhoun County, Alabama

Activity	Potential Hazards	Recommended Controls
Groundwater Sampling	Cross-contamination and contact with potentially contaminated materials	• Sampling technicians will wear proper protective clothing and equipment to safeguard against potential contamination. • Avoid skin contact with water. • Handle samples with care. • Only essential personnel will be in the work area. • Real-time air monitoring will take place before and during sampling activities. • All personnel will follow good hygiene practices. • Proper decontamination procedures will be followed. • All liquids and materials used for decontamination will be contained and disposed of in accordance with federal, state, and local regulations.
	Cut hazards	• Use care when handling glassware. • Wear adequate hand protection.
	Hazard communication	• MSDSs shall be obtained for chemicals brought on site. • Label all containers as to contents.
	Strains/sprains	• Use the proper tool for the job being performed. • Get assistance if needed. • Avoid twisting/turning while pulling on tools, moving equipment, etc.
	Spills/residual materials	• Absorbent material and containers will be kept available where leaks or spills may occur.
	Lighting	• Adequate lighting will be provided to ensure a safe working environment.
	Unattended worker	• Use "buddy system" - visual contact will be maintained with the sampling technician during sampling activities.

Table 5-1

Activity Hazard Analysis
Buildings South of Reilly Air Field, Parcel 501(7)
Fort McClellan, Calhoun County, Alabama

Activity	Potential Hazards	Recommended Controls
Soil Boring and Subsurface Sampling	Cross-contamination and contact with potentially contaminated materials	• Stop immediately at any sign of obstruction. • Sampling technicians will wear proper protective clothing and equipment to safeguard against potential contamination. • Only essential personnel will be in the work area. • Real-time air monitoring will take place before and during sampling activities. • All personnel will follow good hygiene practices. • Proper decontamination procedures will be followed. • All liquids and materials used for decontamination will be contained and disposed of in accordance with federal, state, and local regulations.
	Cut hazards	• Use care when handling glassware. • Wear adequate hand protection.
	Slip, trip, and fall hazards	• Site workers will be required to wear hard hat, safety glasses with side shields, work gloves, and steel-toe/shank boots when working in the field. • Whenever possible, avoid routing cords and hoses across walking pathways. • Flag or cover inconspicuous holes to protect against falls.
	Bees, spiders, and snakes	• Workers shall inspect the work area carefully and avoid placing hands and feet into concealed areas. • Evaluate need for sensitive workers to have prescribed antibiotic or medicine to combat onset of symptoms.
	Poison ivy/oak/sumac	• Avoid plant areas if possible. • Wear long sleeves and long pants. • Promptly wash clothing that has contacted poisonous plants. • Wash affected areas immediately with soap and water.
	Cold stress	• Workers should wear insulated clothing when temperatures drop below 40°F. • Drink warm beverages on breaks. Refrain from drinking caffeinated beverages. • Remove wet clothing promptly. • Take breaks in warm areas. • Reduce work periods as necessary. • Layer work clothing.

Table 5-1

Activity Hazard Analysis
Buildings South of Reilly Air Field, Parcel 501(7)
Fort McClellan, Calhoun County, Alabama

Activity	Potential Hazards	Recommended Controls
Soil Boring and Subsurface Sampling (continued)	Access/egress hazards	• Use qualified and trained bushhog operator. • Keep employees out of the bushhog work area. • Utilize good housekeeping practices. • Keep aisleways, pathways, and work areas free of obstruction. • Clean ice or snow off of walkways or work stations. • Use appropriate footwear for the task assigned.
	Heat rash	• Keep the skin clean and dry. • Change perspiration-soaked clothing, as necessary. • Bathe at end of work shift or day. • Apply powder to affected area.
	Heat cramps	• Drink plenty of cool fluids even when not thirsty. • Provide cool fluid for work crews. • Move victim to shaded, cool area.
	Heat exhaustion	• Conduct physiological worker monitoring as needed (i.e., heart rate, oral temperature). • Set up work/rest periods. • Use the buddy system. • Allow workers time to acclimate. • Have ice packs available for use. • Take frequent breaks.
	Heat stroke	• Evaluate possibility of night work. • Perform physiological monitoring on workers during breaks. • Wear body-cooling devices.

Table 5-1

Activity Hazard Analysis
Buildings South of Reilly Air Field, Parcel 501(7)
Fort McClellan, Calhoun County, Alabama

Activity	Potential Hazards	Recommended Controls
Soil Boring and Subsurface Sampling (continued)	Lightning strikes	• Whenever possible, halt activities and take cover. • If outdoors, stay low to the ground. • Limit the body surface area that is in contact with the ground (i.e., kneeling on one knee is better than laying on the ground). • Seek shelter in a building if possible. • Stay away from windows. • If available, crouch under a group of trees instead of one single tree. • Keep all body parts in contact with the ground as close as possible. • If in a group, keep 6 feet of distance between people.
Moving and Shipping Collected Samples	Heavy lifting	• Use proper lifting techniques. Lifts greater than 60 pounds require assistance or mechanical equipment; size up the lift.
	Pinch points	• Keep hands, fingers, and feet clear of moving/suspended materials and equipment. • Beware of contact points. • Stay alert at all times!
	Cut hazards	• Wear adequate hand protection. Use care when handling glassware.
	Hazard communication	• Label all containers as to contents and associated hazards.
	Heavy lifting	• Use proper lifting techniques. Lifts greater than 60 pounds require assistance or mechanical equipment; size up the lift.

Table 5-1

Activity Hazard Analysis
Buildings South of Reilly Air Field, Parcel 501(7)
Fort McClellan, Calhoun County, Alabama

Activity	Potential Hazards	Recommended Controls
Material Storage	Flammable and combustible liquids	• Store in NO SMOKING AREA. • Fire extinguisher readily available. • Transfer only when properly grounded and bonded.
Disposal of Investigation-Derived Waste (IDW) (Forklift Operation)	Personnel injury, property damage, and/or equipment damage	• Use qualified and trained forklift operators. • The operator shall not exceed the load capacity rating for the forklift. • The load capacity shall be clearly visible on the forklift. • Forklift operators shall inform their supervisor of any prescribed medication that they are taking that would impair their judgement.
	Cross-contamination and contact with potentially contaminated materials	• Stop immediately at any sign of obstruction. • Sampling technicians will wear proper protective clothing and equipment to safeguard against potential contamination. • Only essential personnel will be in the work area. • Real-time air monitoring will take place before and during sampling activities. • All personnel will follow good hygiene practices. • Proper decontamination procedures will be followed. • All liquids and materials used for decontamination will be contained and disposed of in accordance with federal, state, and local regulations.
	Cut hazards	• Use care when handling glassware. • Wear adequate hand protection.
High-Pressure Water Jetting Operations	Heavy lifting	• Use proper lifting techniques. • Lifts greater than 60 pounds require assistance or mechanical equipment; size up the lift.
	Slip, trip, and fall hazards	• Good housekeeping shall be implemented. • The work area shall be kept clean as feasible. • Inspect the work area for slip, trip, and fall hazards.

Table 5-1

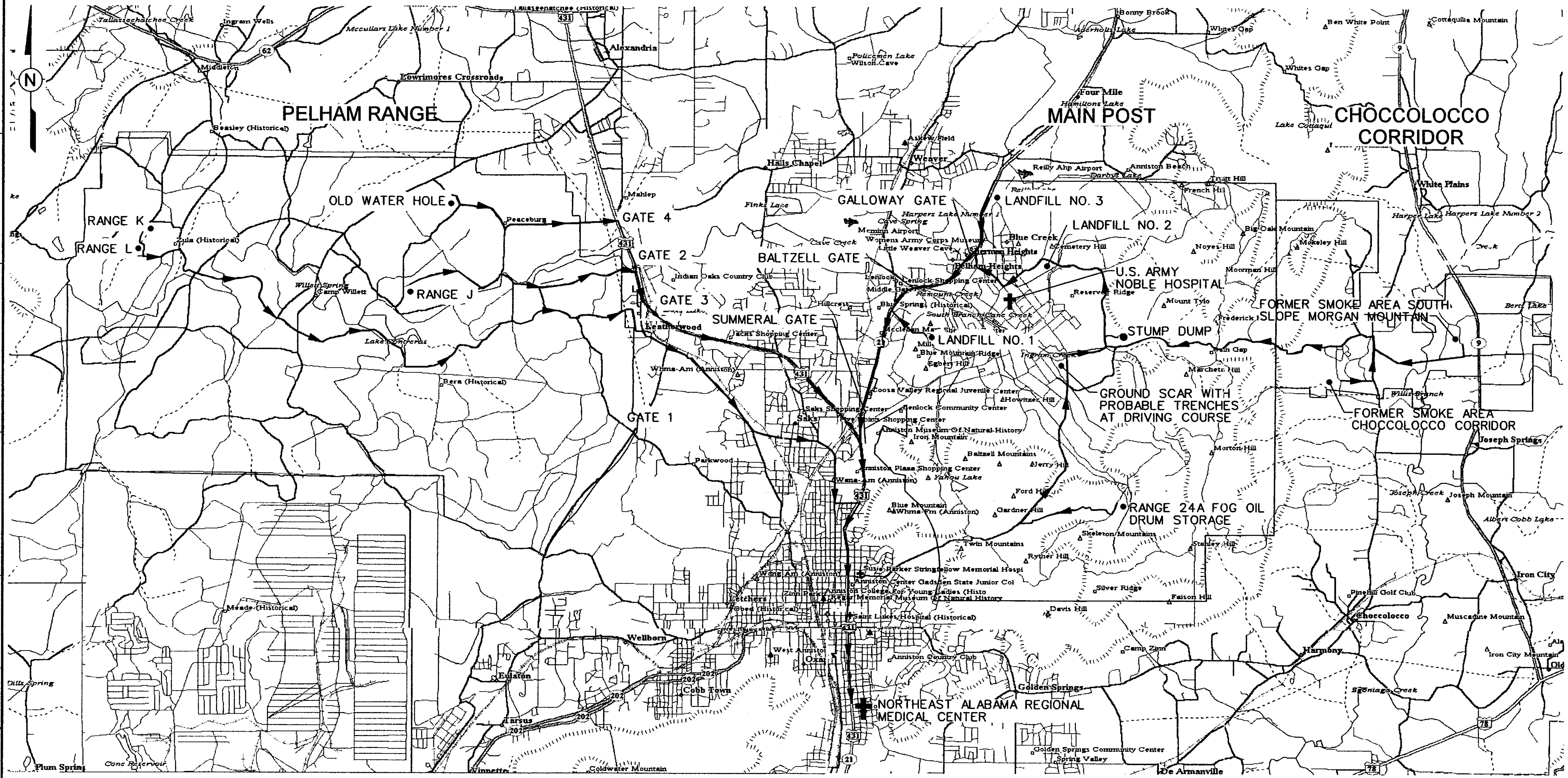
Activity Hazard Analysis
Buildings South of Reilly Air Field, Parcel 501(7)
Fort McClellan, Calhoun County, Alabama

Activity	Potential Hazards	Recommended Controls
High-Pressure Water Jetting Operations (continued)	Fueling	• Only approved safety cans shall be used to store fuel. • Do not refuel equipment while it is operating. • Fire extinguishers shall be suitably placed, distinctly marked, readily accessible, and maintained in a fully charged and operable condition.
	Faulty or damaged equipment	• Equipment shall be inspected before being placed into service and at the beginning of each shift. • Preventive maintenance procedures recommended by the manufacturer shall be followed. • A lockout/tagout procedure shall be used for equipment found to be faulty or undergoing maintenance.
	High-pressure water	• Jetting gun operator must wear appropriate PPE including hard hat, impact-resistant safety glasses with side shields, water-resistant clothing, metatarsal guards for feet and legs, and hearing protection (if appropriate). • One standby person shall be available within the vicinity of the pump during jetting operation. • The work area shall be isolated and adequate barriers will be used to warn other site personnel.
	Unqualified operators	• Only qualified and trained personnel are permitted to operate machinery and mechanized equipment associated with water jet cutting and cleaning.
	Out of control equipment	• No machinery or equipment is permitted to run unattended. • Machinery or equipment will not be operated in a manner that will endanger persons or property nor will the safe operating speeds or loads be exceeded.
	Noise	• Sound levels above 85 dBA mandates hearing protection by nearby site personnel.
	Activation during repairs	• All machinery or equipment will be shut down and positive means taken to prevent its operation while repairs or manual lubrications are being done.

Table 5-1

Activity Hazard Analysis
Buildings South of Reilly Air Field, Parcel 501(7)
Fort McClellan, Calhoun County, Alabama

Activity	Potential Hazards	Recommended Controls
	Pinch points	• Keep feet and hands clear of moving/suspended materials and equipment. • Stay alert and clear of materials suspended .
	Falling objects	• Hard hats are required by site personnel. • Stay alert and clear of material suspended overhead.
	Flying debris	• Impact-resistant safety glasses with side shields are required.
High-Pressure Water Jetting Operations (continued)	Contact with potentially contaminated materials	• All site personnel will wear the appropriate PPE.
Direct-Push Sampling	Faulty or damaged equipment being utilized to perform work	• All machinery or mechanized equipment will be inspected by a competent mechanic and certified to be in safe operating condition. • Equipment will be inspected before use and at the beginning of each shift. • Faulty/unsafe equipment will be tagged and if possible locked out. • Drill rigs shall be equipped with reverse signal alarm, backup warning lights, or the vehicle is backed up only when an observer signals it is safe to do so.
	Uneven terrain, poor ground support, inadequate clearances, contact with utilities	• Inspections or determinations of road conditions and structures shall be made in advance to ensure that clearances and load capacities are safe for the passage or placing of any machinery or equipment. • All mobile equipment and areas in which they are operated shall be adequately illuminated. • Whenever the equipment is parked, the parking brake shall be set. • Equipment parked on inclines will have the wheels chocked. • Inspect brakes and tire pressure on drill rig before staging for work. • Obtain trenching/drilling permit prior to operation.
	Inexperienced operator	• Machinery and mechanized equipment shall be operated only by designated personnel. • Heavy equipment operators shall inform their supervisor(s) of any prescribed medication that they are taking that would impair their judgement.
	Jacks/outriggers	• Ensure proper footing and cribbing.



PELHAM RANGE
MAIN POST
CHOCCOLOCCO CORRIDOR
N
RANGE K
RANGE L
RANGE J
OLD WATER HOLE
GATE 4
GATE 2
GATE 3
GATE 1
GALLOWAY GATE
BALTZELL GATE
SUMMERAL GATE
LANDFILL NO. 3
LANDFILL NO. 2
LANDFILL NO. 1
U.S. ARMY NOBLE HOSPITAL
STUMP DUMP
GROUND SCAR WITH PROBABLE TRENCHES AT DRIVING COURSE
RANGE 24A FOG OIL DRUM STORAGE
FORMER SMOKE AREA SOUTH SLOPE MORGAN MOUNTAIN
FORMER SMOKE AREA CHOCCOLOCCO CORRIDOR
NORTHEAST ALABAMA REGIONAL MEDICAL CENTER
Tallassechatchee Creek
Ingram Wells
Mccullars Lake Number 1
Middleton
Lowrimores Crossroads
Alexandria
Beasley (Historical)
Zula (Historical)
Willett Spring
Camp Willett
Lake Contreras
Bera (Historical)
Peaceburg
Mahlep
Indian Oaks Country Club
Leatherwood
Jacks Shopping Center
Whma-Am (Anniston)
Parkwood
Halls Chapel
Finks Lake
Policemen Lake
Wilson Cave
Askew Field
Weaver
Reilly Ahp Airport
Darbys Lake
Four Mile
Hamiltons Lake
Bonny Brook
Aderholts Lake
Whites Gap
Ben White Point
Cottaquilla Mountain
Lake Cottaquil
Anniston Beach
Truitt Hill
French Hill
White Plains
Harper Lake
Harpers Lake Number 2
Harpers Lake Number 1
Cave Spring
Mcminn Airport
Womens Army Corps Museum
Little Weaver Cave
Cave Creek
Blue Creek
Cemetery Hill
Pelham Heights
Lenlock
Lenlock Shopping Center
Middle Gate
Remount Creek
Hillcrest
Blue Springs (Historical)
South Branch Cane Creek
Mill
Blue Mountain Ridge
Egbert Hill
Ingram Creek
Reservoir Ridge
Mount Tylo
Noyes Hill
Big Oak Mountain
Mokeley Hill
Moorman Hill
Frederick
Berts Lake
Marchetts Hill
Willis Branch
Coosa Valley Regional Juvenile Center
Howitzer Hill
Lenlock Community Center
Saks Shopping Center
Saks
Five Points Shopping Center
Anniston Museum Of Natural History
Iron Mountain
Baltzell Mountains
Jerry Hill
Anniston Plaza Shopping Center
Wana-Am (Anniston)
Yahou Lake
Ford Hill
Blue Mountain
Whma-Fm (Anniston)
Gardner Hill
Morton Hill
Joseph Springs
Joseph Creek
Joseph Mountain
Albert Cobb Lake
Skeleton Mountains
Stanley Hill
Twin Mountains
Ryther Hill
Susie Parker Stringfellow Memorial Hospi
Anniston Center Gadsden State Junior Col
Anniston College For Young Ladies (Histo
Regar Memorial Museum Of Natural History
Saint Lukes Hospital (Historical)
Silver Ridge
Faison Hill
Davis Hill
Iron City
Pinehill Golf Club
Choccolocco
Muscadine Mountain
Iron City Mountain
Harmony
Camp Zinn
Anniston Country Club
Golden Springs
Golden Springs Community Center
Spring Valley
De Armanville
Egoniaga Creek
Meade (Historical)
Letchers
Obed (Historical)
Wellborn
West Anniston
Oxa
Eulaton
Cobb Town
Tarsus
Vinnette
Coldwater Mountain
Dills Spring
Plum Spring
Cone Reservoir
431
62
9
21
202
78

LEGEND:

ROUTE TO NORTHEAST ALABAMA REGIONAL MEDICAL CENTER

U.S. HIGHWAY

HOSPITALS

INVESTIGATION SITES

SCALE

0 8000 16000 FEET

FIGURE 1-1
HOSPITAL EMERGENCY ROUTES

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

IT CORPORATION
A Member of The IT Group

DWG. NO.: ...\774645es.284
PROJ. NO.: 774645
INITIATOR: A. MAYILA
PROJ. MGR.: J. YACOUB
DRAFT. CHCK. BY:
ENGR. CHCK. BY: A. MAYILA
DATE LAST REV.:
DRAWN BY:
STARTING DATE: 8/26/98
DRAWN BY: D. BILLINGSLEY
13 JUL 1999
08:37:15
DBILLING
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